

**Amendments to the Claims:**

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Original) A metrology instrument for mounting on a coordinate position apparatus, the metrology instrument being at least partially constructed from at least one sheet of thermally stable metallic material which is folded to form a three dimensional structure, the at least one sheet of thermally stable material being utilised in the metrology loop of the metrology instrument.
2. (Original) A metrology instrument according to claim 1 wherein the thermally stable material has a coefficient of thermal expansion of  $\leq$  about 15.0 ppm/ $^{\circ}$ C.
3. (Original) A metrology instrument according to claim 2 wherein the thermally stable material has a coefficient of thermal expansion of  $\leq$  about 6ppm/ $^{\circ}$ C.
4. (Original) A metrology instrument according to claim 3 wherein the thermally stable material has a coefficient of thermal expansion of  $\leq$  about 2ppm/ $^{\circ}$ C.
5. (Previously Presented) A metrology instrument according to claim 1 wherein the three dimensional structure includes at least one walled cavity.
6. (Original) A metrology instrument according to claim 5 wherein the walled cavity is filled with a low mass filler.
7. (Previously Presented) A metrology instrument according to claim 1 wherein the at least one sheet is  $\leq$  about 1.5mm thick.
8. (Original) A metrology instrument according to claim 7 wherein the at least one sheet is between about 0.05 – about 0.9mm thick.
9. (Original) A metrology instrument according to claim 7 wherein the at least one sheet is between about 0.1 –about 0.5mm thick.

10. (Previously Presented) A metrology instrument according to claim 1 wherein the metrology instrument comprises a measurement probe.

11. (Previously Presented) A metrology instrument according to claim 1 wherein the metrology instrument comprises a stylus arm.

12. (Previously Presented) A metrology instrument according to claim 1 wherein the metrology instrument comprises a probe head.

13. (Original) A metrology instrument according to claim 12 wherein the at least one sheet of material comprises thermally stable material and is located between a fixed surface of the probe head and the arm of the coordinate positioning apparatus.

14. (Original) A metrology instrument according to claim 13 wherein the structure of the at least one sheet of material is such that it at least partially encloses the fixed structure of the probe head.

15. (Original) A method of manufacture of a metrology instrument comprising:  
providing at least one template of the metrology instrument from a sheet of thermally stable metallic material;

folding the at least one template to produce the metrology instrument.

16. (Original) A method according to claim 15 wherein the sheet of material is made from a thermally stable material.

17. (Previously Presented) A method according to claim 15 wherein the location of the folds are determined by creating a series of perforations along the desired fold line of the sheet of material.

18. (Previously Presented) A method according to claim 15 wherein the location of the folds are determined by creating a fold line of partial thickness in the sheet of material.

19. (Previously Presented) A method according to claim 15 wherein parts of the folded sheet material are joined together by dip soldering.

20. (Previously Presented) A method according to claim 15 wherein the template is formed from an etching process.

21. (Previously Presented) A method according to claim 15 wherein the template is cut from a sheet of material by a laser.

22. (Original) A method according to claim 21 wherein the template is cut from a sheet of material by a laser combined with a water jet.

23. (Currently Amended) A probe head for mounting on a coordinate position apparatus having an arm, wherein a structure comprising at least one sheet of thermally stable material is located ~~within the~~ within a metrology loop between a fixed surface of the probe head and the arm of the coordinate positioning apparatus and the structure is formed from folding the at least one sheet of material.

24. (Currently Amended) A probe head according to claim 23 wherein the structure of the at least one sheet of material ~~is such that it~~ at least partially encloses the fixed ~~structure surface~~ of the probe head.

25. (Canceled)